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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,291	11/19/2003	Lawrence A. Ray	87225PCW	7559

7590 02/22/2007	EXAMINER
Pamela R. Crocker	ALLISON, ANDRAE S
Patent Legal Staff	
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343 State Street	2624	
Rochester, NY 14650-2201		

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *11/19/2003*.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Claim Objections

1.   Claims 4 and 5 are objected to because of the following informalities:

   a) Claim 4 states that the method for creating a message template

   includes the step of providing 74 bits as a capacity for the message for

   message template; however, this step is not disclosed in the

   specification.

   b) Claim 5 states that the method for creating a message template

   includes the step of providing a 128 by 128 array as the message

   template; however, this step is not disclosed in the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

3.   Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

   Claim 7 recites the limitation "(Lois to insert equation)" in line 4, page14.

There is insufficient antecedent basis for this limitation in the claim.

   Claim 8 recites the limitation "(Lois to insert equation)" in line 2, page 14.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(e) as being

anticipated by Honsinger (US Patent No.: 6,678,390).

As to independent claim 1, Honsinger teaches method for creating a

message template used for embedding hidden messages (employ message

template to indicate the location of data in a message, column 2, lines 48-50), the

method comprising the steps of: (a) determining a message template

performance metric comprising a dispersal measure having both a spatial

domain function and a frequency domain function (see column 3, lines 37-46, for

the spatial domain component and (see column 4, lines 6-46 for the frequency

component); (b) developing a numerical optimization algorithm containing the

message template performance metric as a basis for optimization (see column 4,

lines 1-16); (c) determining the message template geometric configuration

comprising: (i) determining a message template capacity (e.g. 130 bits; see

column 4, lines 56) (ii) determining a message template area (e.g. 128x128 see

column 4, line 56); (d) applying the numerical optimization algorithm to the

message template geometric configuration which results in an optimal message

template (see column 5, lines 1-15, where the algorithm is applied to the

message template and the message template is also saved).

As to claim 2, Honsinger teaches the method, wherein step (a) includes

providing the spatial domain component as a requirement to disperse ones within

the message template (see column 3, lines 37-46, for the spatial domain

component) and providing the frequency domain component as a requirement as

to eliminate replicating shifts (see column 4, lines 6-46 for the frequency

component).

As to claim 3, Honsinger teaches the method wherein step (b) includes

providing simulated annealing as the numerical optimization algorithm (stochastic

annealing algorithm, column 5, lines 40-43).

As to claim 5, Honsinger teaches the method, further comprising the step

of providing a 128 by 128 array as the message template (column 3, line 40).

As to claim 6, Honsinger teaches the method further comprising the step

of storing the optimal message template (step 34, see Fig 4).

As to claim 7, Honsinger teaches the method further comprising using

(Lois to insert equation) as the spatial domain component (see column 3, lines

37-46, for the spatial domain component).

As to claim 8, Honsinger teaches the method further comprising the step

of using (Lois to insert equation) as the frequency domain component (see

column 4, lines 6-46 for the frequency component).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Honsinger (US Patent No.: 6,678,390).

As to claim 4, Honsinger discloses wherein the capacity of the message

template is 130 bits (see column 4, lines 56) however does not expressly

disclose the method as further comprising the step of providing 74 bits as a

capacity for the message template. Applicant has not disclosed that having the a

message capacity of 74 bit provides an advantage, is used for a particular

purpose or solves a stated problem. One of ordinary skill in the art, furthermore,

would have expected Applicant's invention to perform equally well with 130 bit

because the message capacity is directed related to the size of the host image or

the image that a watermark is to be embedded in.

Conclusion

The prior art made part of the record and not relied upon is considered pertinent to applicant's disclosure.

Honsinger et al (Patent No.: 6,751,335) is cited to teach a method for generating a dispersed message for data embedding.

Honsinger et al (Patent No.: 6,925,192) is cited to teach method of providing a secure document.

Honsinger (Patent No.: 6,567,532) is cited to teach method and computer program for extracting an embedded message from a digital image.

Wen et al (Patent No.: 6,754,365) is cited to teach method for detecting embedded information in images.

Powel et al (Patent No.: 5,721,788) is cited to teach a method and system for digital image signatures.

Rhodes (US Patent No.: 5,850,481) is cited to teach a steganographic system.

Anaizi et al (US Patent No.: 7,065,226) is cited to teach a method for embedding information and extracting the same.

Macy et al (US Patent No.: 6,707,926) is cited to teach a template for watermark decoder synchronization.

Braudaway et al (US Patent No.: 7,130,442) is cited to teach a method of protecting images with an image watermark.

Honsinger et al (NPL Document Titled: Data Embedding Using Phase Dispersion) is cited to teach a method of data embedding based on convolution of message data with a random phase carrier.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrae S. Allison whose telephone number is (571) 270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571) 272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
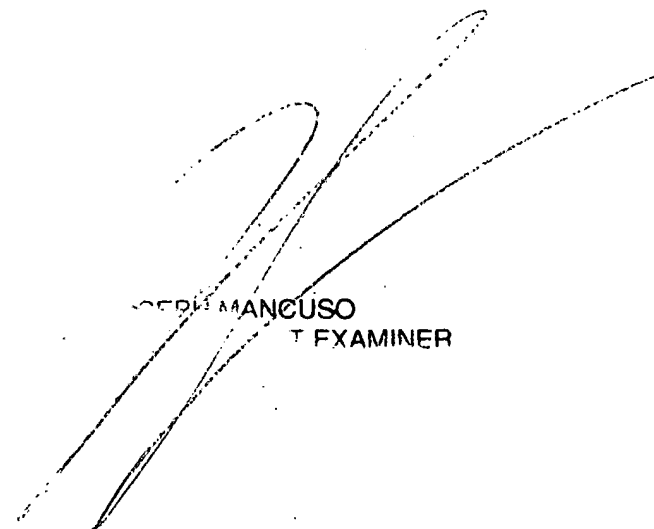
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrae Allison

February 15, 2007

/AA.

JERI MANCUSO

T EXAMINER